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RESEARCH NOTES

真菌细胞壁结构性多糖与丙烯酸接枝共聚反应研究

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摘要 Acrylic acid was graft-copolymerized onto Rhi. oryzae's cell wall structural polysacchaxide
directly and efficiently in aqueous solution with ceric ammonium nitrate as initiator. The maximal grafting percentage of 135.5% was obtained under the condition of [Ce4+]=5mmol.L
-1, [AA]=1mol.L-1, T=60°C and t=3h. Graft copolymerization was suggested to proceed through free radical reaction mechanism. Grafting occurred primarily on chitosan. Acrylic acid was also attempted to be grafted onto Asp. niger cell wall structural polysaccharide, and only 44.2% of grafting percentage was resulted.

关键词 graft Rhi. oryzae cell wall acrylic acid ceric ammonium nitrate

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Graft Copolymerization of Acrylic Acid onto Fungal Cell Wall Structural Polysaccharide

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Abstract Acrylic acid was graft-copolymerized onto Rhi. oryzae's cell wall structural polysacchaxide directly and efficiently in aqueous solution with ceric ammonium nitrate as initiator. The maximal grafting percentage of 135.5% was obtained under the condition of [Ce4+]=5mmol.L -1, [AA]=1mol.L-1, T=60°C and t=3h. Graft copolymerization was suggested to proceed through free radical reaction mechanism. Grafting occurred primarily on chitosan. Acrylic acid was also attempted to be grafted onto Asp. niger cell wall structural polysaccharide, and only 44.2% of grafting percentage was resulted.

Key words graft; Rhi. oryzae; cell wall; acrylic acid; ceric ammonium nitrate

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